

Risk Management

Risk safety, technical, cost, schedule, and other types can threaten mission success. To reduce risk, we need to manage our projects systematically, especially if we expect to be successful with faster, better, cheaper projects. Risk Management is not high tech and it is not complicated. The Risk Management process efficiently identifies, analyzes, plans, tracks, controls, communicates, and documents risk to increase the likelihood of achieving program/project goals.

Every project should have a prioritized list of its risks at any point in the life cycle, along with the programmatic impacts. The list should indicate which risks have the highest probability, which have the highest consequences, and which need to be worked now. It means that all members of the project team should have access to the risk list so that everyone knows what the risks are. It means that the project team members are responsible for the risks. The team should work to reduce or eliminate the risks that exist and develop contingency plans, so that we are prepared should a risk become a real problem.

From the beginning of a project, the Project Manager and team should have an idea of what the risk signature of the project will be. The risk signature will identify expected risks over the course of the project and when the project risks are expected to increase and decrease. During the project, risks should be tracked to determine if mitigation efforts are working.

Risk Management means the entire team is continuously working together to reduce or eliminate risks as part of the normal course of business not in separate risk

management meetings that do not involve all team members. Risk Management is not an add-on ; it must be part of the fabric of project management. As we move forward and continue to open the space frontier, Risk Management must be a part of our project management tool kit. Effective Risk Management depends on a thorough understanding of the concept of risk, the principles of Risk Management, and the establishment of a disciplined Risk Management process. While there is no special set of methods, tools, or communication mechanisms that will work for every project, every NASA manager and employee should have a core set of skills. Centers offer classroom training to bring the team up to speed on Risk Management; Web-based training is also available. Let us be serious about Risk Management in order to increase the probability of mission success.

For more information on Risk Management, you may contact the Agency's Office of Safety and Mission Assurance (OSMA) at Headquarters or any Center Safety and Mission Assurance organization. The OSMA Risk Management Page can be found at <http://www.hq.nasa.gov/office/codeq/risk/risk.htm>

NASA Best Practices

NASA Project Managers

- Have a prioritized risk list at any point during the project life cycle along with programmatic impacts.
- Have an idea of what the risk signature of the project will be.
- Apply Risk Management (RM) methodology to your projects.
- Use RM as early as possible in the program/project lifecycle.

NASA Centers

- Check to determine if RM is being conducted by projects at your center.
- Provide training and assistance in RM to project offices.